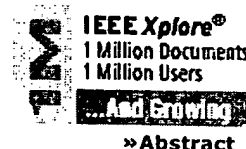


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[\[PDF Full-Text \(88 KB\)\]](#) [ABSTRACT PLUS](#)**Robust hash functions for digital watermarking**

Fridrich, J. Goljan, M.

Center for Intelligent Syst., State Univ. of New York, Binghamton, NY;

This paper appears in: Information Technology: Coding and Computing, 2000. Proceedings. International Conference on

Meeting Date: 03/27/2000 -03/29/2000

Publication Date: 2000

Location: Las Vegas, NV , USA

On page(s): 178-183

References Cited: 15

IEEE Catalog Number: PR00540

Number of Pages: xvi+528

Abstract:

Digital watermarks have been proposed for authentication of both video data and still images and for integrity verification of visual multimedia. In such applications, the watermark has to depend on a secret key and on the original image. It is important that the dependence on the key be sensitive, while the dependence on the image be continuous (robust). Both requirements can be satisfied using special image digest functions that return the same bit-string for a whole class of images derived from an original image using common processing operations. It is further required that two completely different images produce completely different bit-strings. We discuss methods how such robust hash functions can be built. We also show how the hash bits has another application, the robust image digest can be used as a search index for an efficient image database search

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